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Via Electronic Mail

November 30, 2018

Mr. Barnes Johnson
Director
Office of Resource Conservation
and Recovery
USEPA Headquarters
1200 Pennsylvania Avenue, N. W. *Mail Code:* 5301P
Washington, DC 20460

Johnson.Barnes@epa.gov

Mr. Richard Huggins
Acting Chief
Energy Recovery and Waste Disposal Branch
Office of Resource Conservation and Recovery
USEPA Headquarters
1200 Pennsylvania Avenue, N. W.

Mail Code: 5304P

Mail Code: 5304P
Washington, DC 20460
Huggins.Richard@epa.gov

RE: CCR Liner Equivalency Analysis and Report Transmittal

Dear Messrs. Johnson and Huggins:

I write on behalf of Salt River Project Agricultural Improvement and Power District ("SRP") to provide EPA with a technical report prepared by Haley & Aldrich describing the physical and hydraulic characteristics of the geologic material underlying the CCR surface impoundment at SRP's Coronado Generating Station ("CGS") in St. Johns, Apache County, Arizona. As the report documents in detail, while the geologic materials underlying the impoundment do not meet the technical criteria for CCR liner systems set forth in 40 C.F.R. 257.71, the actual performance of this natural liner system exceeds the performance of the liner criteria in the CCR rule in protecting human health and the environment.

The report concludes that a conservative estimate of the time for infiltrating water to reach the upper most aquifer would be approximately 2,200 years. Additionally, the report looked at hydraulic conductivity data collected historically in-situ (Bechtel, 1976) and more recently exsitu on undisturbed samples (Haley & Aldrich, 2016) and found a geometric mean of all samples of 3.2×10^{-7} cm/sec for the approximately 250-ft thick Chinle Formation before it reaches the uppermost aquifer. It is noteworthy that the most recent investigation that followed commonly acceptable engineering testing methods (ASTM D5084) yielded a geometric mean of

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 2.6×10^{-8} cm/sec, which is less than the hydraulic conductivity performance standard of the prescriptive liner system in the federal rule.

Notwithstanding the superior performance of this natural system, the impoundment at the CGS facility is considered "unlined" under the current CCR rule and, per the recent D.C. Circuit decision in *USWAG v. EPA*, will be subject to forced closure. This is the case even though the CGS impoundment is not adversely impacting groundwater and the natural liner system performs as well, if not better, than the criteria for liner systems prescribed in the rule.

We are providing this information to EPA as record evidence to support the development of a new liner equivalency demonstration in the CCR rule to enable owners/operators of liner systems that differ from, but perform as effectively as, the criteria set forth in the CCR rule, to certify that their CCR impoundments also qualify as "lined" impoundments. SRP is a member of the Utility Solid Waste Activities Group ("USWAG") and we understand that Jim Roewer, Executive Director of USWAG, will be following up with you regarding this matter and, in particular, the importance of establishing a new liner equivalency demonstration in the CCR rule.

In the meantime, please contact Andrea Martinez at Andrea.Martinez@srpnet.com, or (602) 236-2618, with questions regarding the attached report.

Sincerely,

Kara M. Montalvo

Enc.

cc: Peter Wright, EPA; wright.peter@epa.gov Steven Cook. EPA; cook.steven@epa.gov Betsy Devlin, EPA; devlin.betsy@epa.gov Andrea Martinez, SRP

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